

LASER ABLATION RESISTANT COPPER FOIL

ABSTRACT OF THE DISCLOSURE

A copper foil for lamination to a dielectric substrate is coated with a laser ablation inhibiting layer having an average surface roughness (R_z) of less than 1.0 micron and an average nodule height of less than 1.2 micron that is effective to provide a lamination peel strength to FR-4 of at least 4.5 pounds per inch. The coated foil further has a reflectivity value of at least 40. The coated foil is typically laminated to a dielectric substrate, such as glass reinforced epoxy or polyimide and imaged into a plurality of circuit traces. Blind vias may be drilled through the dielectric terminating at an interface between the foil and the dielectric. The coated foil of the invention resists laser ablation, thereby resisting piercing of the foil by the laser during drilling.

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